



Delft University of Technology

Document Version

Final published version

Licence

CC BY-NC-ND

Citation (APA)

Gonçalves, M., & Quan, Y. (2025). Future-Ready Creative Organization: Unleashing Creative Confidence in Organizations by Reflecting on Their Cultural Values. In T. X. Bui (Ed.), *58th Hawaii International Conference on System Sciences (HICSS)* (pp. 6119-6128). University of Hawaii at Manoa. <https://doi.org/10.24251/HICSS.2025.732>

Important note

To cite this publication, please use the final published version (if applicable).
Please check the document version above.

Copyright

In case the licence states "Dutch Copyright Act (Article 25fa)", this publication was made available Green Open Access via the TU Delft Institutional Repository pursuant to Dutch Copyright Act (Article 25fa, the Taverne amendment). This provision does not affect copyright ownership.
Unless copyright is transferred by contract or statute, it remains with the copyright holder.

Sharing and reuse

Other than for strictly personal use, it is not permitted to download, forward or distribute the text or part of it, without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license such as Creative Commons.

Takedown policy

Please contact us and provide details if you believe this document breaches copyrights.
We will remove access to the work immediately and investigate your claim.

This work is downloaded from Delft University of Technology.

Future-Ready Creative Organization: Unleashing Creative Confidence in Organizations by Reflecting on Their Cultural Values

Yilin Quan
Industrial Design Engineering,
Delft University of Technology
y.quan@tudelft.nl

Milene Gonçalves
Industrial Design Engineering,
Delft University of Technology
m.guerreirogoncalves@tudelft.nl

Abstract

As a key element for futuring, creativity is becoming increasingly essential in today's workplaces and organizations. Although creativity is an innate ability, not everyone feels confident enough to express their creative ideas. While organizational culture plays a significant role in shaping the creative climate, the influence of creative cultural values on employees' creative confidence remains unclear. In this paper, two studies were conducted: a preliminary study involving interviews to map out creative cultural values at two Dutch national companies, and a follow-up study to propose and evaluate a design intervention. As a result, it was found that the two organizations share a similar creative culture. Key creative cultural values and their impact on creative confidence were identified, leading to the development of the CreatOrg workshop toolkit. This toolkit aims to enhance employees' creative confidence by increasing their sensitivity and awareness towards specific creative cultural values, identified in the preliminary study.

Keywords: Creativity, Creative Confidence, Futuring, Future-readiness, Organizational Cultural Values

1. Introduction

The current global transitions, marked by the shift from the industrial age to an era of complexity, highlight the importance of fostering creative futures (Montuori & Donnelly, 2022). Creativity and imagination play pivotal roles in envisioning positive futures and forecasting transformative changes (Balcom Raleigh & Heinonen, 2019; Hopkins, 2019; Montuori & Donnelly, 2022). This recognition is also true in an organizational context, with creativity becoming increasingly acknowledged in today's dynamic and competitive workplaces (Baer & Oldham, 2006). In fact, critical thinking and creativity skills

have been at the top of the most important skills for industry future-readiness (Li, 2022). An organization's ability to pivot and innovate in its processes, products, and services can be enhanced by developing creative confidence and commitment among employees (Phelan & Young, 2003). Conversely, neglecting creativity in organizations can diminish employees' drive to innovate, stunting personal growth and hindering organizational foresight into the future. In essence, it damages an organization's future-readiness and ability to bounce back in adverse situations. A lack of creativity can ultimately erode organizations' competitive edge in the market, resulting in long-term unfavorable effects (Urbancová, 2013).

Encouraging creativity can be challenging, and often requires an enriching environment (Amabile et al., 1996; Gotlieb et al., 2019). After all, the cultural background shapes creative perspectives (Niu & Sternberg, 2001) and expressions (Lubart et al., 2010). One of the challenges in fostering creativity in the workplace lies in the organizational environment since the creative climate can be greatly influenced by the organizational context and its culture (Ali Taha et al., 2016; Mumford & Simonton, 1997; Tesluk et al., 1997). Nowadays, organizations tend to cultivate their own creative environments (Mathisen & Bronnick, 2009; Phelan & Young, 2003) and unique innovation cultures. However, creative performance can be impacted and limited by social norms (Deng et al., 2016; Perry-Smith, 2006; Tierney & Farmer, 2011), organizational structures and operations (Tesluk et al., 1997), leadership styles (Derecskei, 2016), cultural habits (Amabile, 1988), and job characteristics (Tierney & Farmer, 2011).

Although everyone has the potential to be creative (Beghetto, 2024; Runco, 2004), not everyone may have the confidence to behave creatively. To this, we refer to creative confidence, which entails the self-belief in one's abilities to think and act creatively across various

domains (Karwowski et al., 2019). This belief profoundly influences how individuals participate in creative activities as part of their daily routines (Kelley & Kelley, 2013). It is critical for organizations to develop appropriate environments for creativity and empower employees with the confidence to think and express themselves creatively.

Organizations face both the opportunity and challenge to nurture their employees' creative potential by fostering a cultural environment to boost their employees' creative confidence, thereby enabling them to create a future together. Although creative confidence and organizational culture have been studied independently from each other, past studies have not identified the key creative cultural values that contribute to creative confidence within organizations. Thus, there is an emerging need to investigate the influence of creative cultural values within organizations on employees' creative confidence. Furthermore, this calls for creative confidence interventions which resonate with the organization's cultural values. In this study, two Dutch companies, Rabobank and PostNL, were selected as the context. Our aims are: 1) to outline the creative cultural values within those companies and investigate their influence on creative confidence, and 2) to design an intervention to enhance employees' creative confidence.

2. Theoretical background

2.1. Creativity and future

Creativity extends far beyond the traditional realm of artistic fields, encompassing a much wider range of domains that are applicable to many areas of life (Kelley & Kelley, 2013). The definition of creativity is also multifaceted. According to the Five A's Framework (Glăveanu, 2013), creativity involves the *actions* undertaken by an *actor* (or a collective), where they continually engage with various *audiences* and the *affordances* presented by the material world, resulting in the creation of novel and valuable *artifacts*. In this paper, we specifically refer to creativity in an organizational context, where resources, environments, processes and values influence the *actor(s)* (i.e., employees) and the *artifacts* they create. However, creative *artifacts* can go beyond tangible products or services that the organizations design - their futures can also be created, "through imagination and choice" (Hovorka & Peter, 2019). Although businesses and technology predominantly influence the quality of future, they may adopt a reactive stance, responding to

changes rather than proactively driving them (Hovorka & Peter, 2019). Not only is creativity a vital factor for future-foresight, but enhancing organizational creativity can foster greater proactivity and flexibility, thereby improving readiness for unknown emerging challenges. By integrating creative and imaginative practices into businesses, organizations can uncover hidden elements through their actions and choices, and develop *artifacts* that are more likely to be accepted to create the organization's future (Hovorka & Peter, 2019). Yet, the future does not happen in a vacuum - physical and social structures, practices and organizational routines create boundaries to how we imagine the future. Breaking away from the present requires openness, flexibility and critical thinking to imagine and make preferable futures (Dunne & Raby, 2013). For that, one needs to first believe in their own creative potential.

2.2. Creative confidence factors

Believing in one's ability to think or act creatively has been shown to be a significant predictor of creative performance (Tierney & Farmer, 2002). In other words, if one does not believe they can create, their task engagement, effort and persistence will likely be limited (Karwowski et al., 2019). Creative confidence is a malleable self-belief, which can be further decomposed into self-efficacy (Bandura, 1997) and creative self-concept (Beghetto & Karwowski, 2017). What distinguishes these two concepts is their temporal orientation, specificity and malleability (Karwowski et al., 2019). Here we define creative confidence as the perceived belief in one's ability to think or act creatively, independently of the domain, considering both past experiences and future tasks.

To explore which factors influence creative confidence, we focus on creative self-efficacy because it is more malleable and serves as a predecessor to self-concept (Bong & Skaalvik, 2003). The self-efficacy concept has been abundantly investigated (e.g., Bandura, 1986; 1997; Tierney & Farmer, 2002) and is known to be influenced by a range of socio-psychological and environmental factors (Beghetto & Karwowski, 2017). Bandura (1997) identified four factors that influence self-efficacy: 1) *Mastery experience* is the successful completion of tasks or challenges, which reinforces the belief that similar future endeavors can be accomplished. 2) *Vicarious experience* involves observing the actions of others to gain information about one's own potential abilities. As a result, completing creative tasks successfully or observing others' success can boost

creative confidence, while experiencing or witnessing failure can diminish it. 3) *Social persuasion* refers to the expression of confidence, encouragement, and support for an individual's ability to succeed in a challenging task or situation. Consequently, social support from colleagues can positively enhance creative confidence, whereas negative feedback may impede it. 4) *Physiological/Affective states* encompass a person's emotional conditions, such as excitement, stress, and anxiety, which can impact how they perceive their competence in a particular situation. Those emotional states can influence perceived competence in performing creative tasks.

In addition, organizational training research studies revealed that goal orientation can also serve as a factor of self-efficacy (Bell & Kozlowski, 2002; Howardson & Behrend, 2015). According to Dweck (1986), goal orientation can be subdivided into two: 1) a *learning orientation* determines the drive to enhance one's abilities by acquiring new skills and conquering unfamiliar situations, while 2) a *performance orientation* signifies a motivation to showcase one's competence to others and seek positive evaluations. *Performance orientation* was found to correlate positively with self-efficacy in high-ability individuals while negatively in low-ability individuals (Bell & Kozlowski, 2002). This suggests that high-ability employees who perceive a higher drive to learn may exhibit greater creative confidence.

Other factors that can influence creative confidence are also mentioned in the literature, such as *material affordance* (Beghetto, 2016) and *dialogical features* (Glăveanu, 2017). However, at this stage, we chose to focus on well-established ones. As a result, six creative confidence factors for our study were selected: *mastery experience*, *vicarious experience*, *social persuasion*, *physiological/affective states*, *learning orientation*, and *performance orientation*.

2.3. Organizational culture

Leveraging the value of creative *actors* within organizations requires an appropriate fit with the organizational structure, style, and approach (Pitta et al., 2008). According to Tesluk et al. (1997) and Burkus (2014), while modifying the climate for creativity is relatively easier, changing the deeply ingrained norms, values, and beliefs that shape organizational culture is a challenging and time-consuming endeavor. In order to effectively enhance employees' creative confidence, alignment with the original organizational culture is essential, as

inconsistencies often lead to failure (Burkus, 2014; Tesluk et al., 1997).

To gain a better understanding of what organizational culture consists of, two theoretical models were explored: the Onion model (Hofstede et al., 2010), and the Three Levels of Organizational Culture (Schein & Schein, 2017). The outer layer of organizational culture encompasses visible cultural artifacts within the organization, such as symbols, language, physical environment, role models, and rituals. Moving inward, cultural value expressions become less tangible, which are embodied through the espoused beliefs and values articulated by organizational executives. Over time, these artifacts and beliefs become deeply ingrained within practices, being accepted as cultural norms and reflecting the innermost layer: the organization's basic assumptions and core cultural values. A comparative example can be reviewed in the study of Pitta et al. (2008): if organizations exhibit less segmentalism in their cultural values, they tend to possess artifacts such as integrative structures, open communication channels, and collaborations among diverse team members, thereby leading to an environment that facilitates trust-building among teams and managers. In contrast, organizational cultures characterized by segmentalism are often perceived to have significant power distance within hierarchical structures and a lack of supervisor support and encouragement. Boeijen & Zijlstra (2020) highlight that culture is reflected by the precipitation of daily practices over time, indicating its resilience to immediate change. Therefore, drastically reshaping existing cultural values is not recommended. In order to assess the creative cultural values' impacts on employees' creative confidence, it is important to dive into the innermost layer of organizations' creative cultures, to understand how it can be slowly reshaped.

To be able to measure cultural values, Hofstede et al. (2010) developed a widely recognized tool called socio-cultural dimensions. It provides a comprehensive assessment of different cultural value dimensions and enables comparisons between different cultural groups. In the context of our study, concerning organizations, creativity and future-orientation, we found five dimensions to be highly relevant: *hierarchy* ('high hierarchy' vs 'low hierarchy'), *identification* ('individual' vs 'together'), *time* ('past' vs 'future'), *aim* ('care' vs 'achievement'), and *attitude* ('fun' vs 'duty'). *Hierarchy* refers to how power is distributed within a group and the degree to which it is accepted. *Identification* relates to the preferred level of individual autonomy and the strength of interpersonal bonds within the group. Regarding *time*, some cultures take

pride in their history and traditions, emphasizing past achievements, while others prioritize future prospects. *Aim* reflects the predominant values a group upholds, whether centered around caring for each other or achieving success. In terms of *attitudes*, some cultures may emphasize adherence to rules and responsibilities, while others embrace uncertainty and improvisation, preferring ambiguity over clear-cut guidelines.

Drawing upon these dimensions and factors of creative confidence, we created a conceptual lens (Figure 1) to capture our three focal points: culture, creativity, and future. Our study addresses the following research question, in regard to the two Dutch organizations: “What are the positions of Rabobank and PostNL regarding their creative cultural values within socio-cultural dimensions, and how might these values impact employees’ creative confidence?” Additionally, a second research question arises: “How can we design an intervention tailored to the cultural values to enhance employees’ creative confidence?”

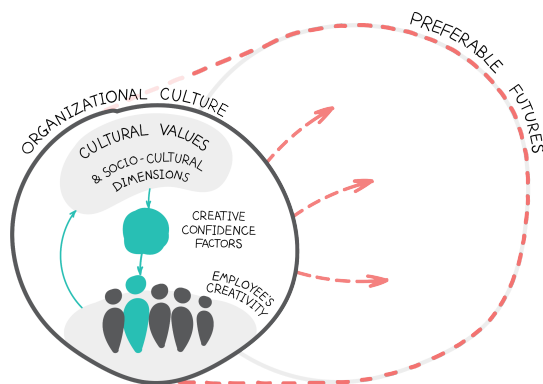


Figure 1. The conceptual lens used in this study

3. Context

We have selected two companies in the Netherlands via purposeful sampling. Rabobank and PostNL are two large Dutch companies with significant market presence in the Netherlands. They are both leading corporations with substantial market shares and influential roles in shaping future services. PostNL operates in the postal and logistics industry, while Rabobank is a prominent player in the banking and financial services sector. Their different industry backgrounds allow for a comparative analysis of creative cultures. Meanwhile, both of them have shown a commitment to innovation and creativity. They recognize the importance of staying competitive in the rapidly evolving business landscapes and they are actively investing in business innovations. Two studies were defined in order to address our aims: The

preliminary study seeks to outline the creative cultural values within those companies and investigate their influence on creative confidence. The follow-up study focuses on the design of an intervention to enhance employees’ creative confidence.

4. Preliminary study

4.1. Preliminary study method

Cultural values are often embedded in daily experiences and behaviors, making them difficult to uncover through traditional interviews. To address our first aim and research question, the Contextmapping method (Sanders & Stappers, 2012) was employed to guide the research process. This approach helps to uncover participants’ latent knowledge and generate rich qualitative data based on their documented experiences through sensitization. Such data collection process is largely exploratory and ambiguous, but enables the emergence of relevant topics (Visser et al., 2005). In such approach, the relationship between theoretical knowledge, insights into creative cultural values, and employees’ creative confidence only became apparent during data analysis.

Participants from both companies were selected and recruited based on their involvement in innovation projects, encompassing two main roles: innovation coaches and coachees. Innovation coaches are experts of innovation within the organization, who coach and facilitate workshops with innovation project teams, while the coachees are the members of the innovation team who are being coached. To ensure diverse perspectives, coachees from various business backgrounds were selected (e.g., experiment lead, marketing, business development manager, trainee, and e-commerce innovation specialist). After selection, participants were asked to reflect individually on their innovation experiences by filling out a sensitizing booklet. These booklets were then used as references during subsequent semi-structured interview sessions.

The exercises from the sensitizing booklet followed the Path of Expression (Sanders & Stappers, 2012), which allows participants to envision their aspirations for the future by reflecting on their experiences. During the interview, participants were asked to expand on their daily work experiences in innovation projects. Examples included: “What does your typical day look like?”, “What resources/tools do you use in your sessions?”, “If you could facilitate someone’s creativity, who would you approach in your

network?” and “What do you think is needed to foster creative confidence in your workplace?”.

Each interview session lasted for one hour. In the end, a total of ten interviews were conducted, with five participants from each company. There were four innovation coaches (from Rabobank) and six coachees (one from Rabobank and five from PostNL) (Figure 2).



Figure 2. Participants are explaining their booklets during the interview sessions

After the interviews, data analysis was conducted by the first author, who performed two rounds of coding and one comparative mapping, while the second author provided feedback. Together both authors resolved any discrepancy. The steps were:

- 1) Initial coding: The interview sessions were recorded and fully transcribed. For each participant, quotes with similar meanings were grouped together and an interpretation was formulated. Example quotes from an innovation coach at Rabobank include: “Innovation is not reaching everyone”, and “If the whole bank was innovating, then we wouldn’t be trustworthy because you need to take a lot of risks when you’re innovating.” They were then interpreted as: “The organization doesn’t expect, and cannot afford everyone to innovate.” Consequently, a statement card was created for each interpretation.
- 2) Focused coding: Statement cards from all participants were clustered to create categories (E.g., the category “People are not used to imperfection”, consisted of statement cards titled “Imperfection leads to anxiety” and “Organization is afraid of losing reputation if risk is not analyzed.”)
- 3) Comparative mapping: Firstly, categories were outlined based on the six selected creative confidence factors (Section 2.2). The categories were then mapped with the five chosen socio-cultural dimensions (Section 2.3) to delineate relevant creative cultural values for the companies. The connections between the creative confidence factors and the

creative cultural values were then interpreted. For example, a category labeled “Confidence is affected by social pressure,” illustrated by the quote “I don’t want anyone to attack the ideas because that limits creativity,” is associated with the factor of *social persuasion* (Bandura, 1997). Within the socio-cultural dimensions, this category was positioned on the middle-left side of the *identification* dimension (away from the ‘together’ cultural value) (Figure 3). This would lead to the interpretation that: An emphasis on the ‘together’ cultural value for *identification* could undermine creative confidence, as *social persuasion* might be weakened. Ultimately, categories that appeared in similar locations were grouped, indicating the company’s location on the socio-cultural dimensions. Final interpretations of the relationship between creative confidence and cultural values were made based on the frequency of creative confidence factors unfolded within each group.

4.2. Preliminary study result: awareness and sensitivity to creative cultural values

As a result, a total of 119 statement cards were created, with 35 categories emerging from the clustering process. The preliminary study revealed that the creative cultures of Rabobank and PostNL exhibit a similar pattern (Figure 3). This pattern was further validated in the follow-up study (Section 5) when companies’ employees corroborated the results. We uncovered a number of findings on the companies’ positions within each dimension and how cultural values impact employees’ creative confidence.

Hierarchy: Regarding the dimension of *hierarchy*, both companies exhibit a ‘high hierarchy’ value in their creative culture. Coaching sessions often lack direct interactivity, resulting in some coaches feeling distant from their teams. As one coach said: “The ones I do mainly are listening as a coach because we are not the ones really bringing the content usually.” Thus, the coachee team might perceive the coaches as being at a higher hierarchical level above them. In a culture with an emphasis on ‘high hierarchy’, it was found that creative confidence can be boosted through *social persuasion* (Bandura, 1997), where encouragement from individuals with more power carries more weight. However, employees with less power might struggle to have their ideas taken seriously due to power gaps. This value was also revealed to negatively affect *performance orientation* (Dweck, 1986), as idea judgements may be skewed by power distance.

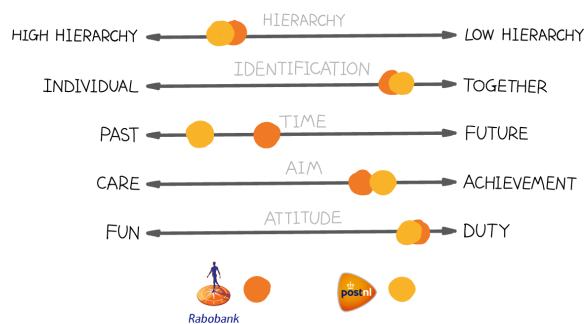


Figure 3. Creative cultural values for Rabobank and PostNL share a similar pattern

Identification: Both companies are located on the ‘together’ side of the *identification* dimension. Teams highly prioritize collaboration, where coaches and coachees alike believe that team collaboration fosters creativity, particularly when working with familiar teams and communicating in the same language. One coachee stated: “I think for me to be confident also in my creativity means that I have people in my surroundings that make crazy ideas... because I don’t doubt... That helped me to get crazy as well.” Such an environment facilitates learning and interaction among individuals. However, it was also revealed that individuals desire opportunities for personal reflection, but time constraints currently prevent this. Embracing ‘individual’ cultural value for *identification* seems to affect *physiological/affective states* (Bandura, 1997) and *learning orientation* (Dweck, 1986). This value may allow employees to better regulate their energy states, fostering positive physiological states conducive to creative tasks. Moreover, coachees need time to digest learning, and their *learning orientation* can be enhanced by providing more individual focus to reflect. On the other hand, the ‘together’ cultural value was found to boost *performance orientation* (Dweck, 1986) through increased performance opportunities and feedback. It fosters *vicarious experience* (Bandura, 1997) via observation and social persuasion benefits from confident colleagues. However, the social environment may also erode creative confidence by subjecting individuals to harsh external judgments.

Time: Regarding the *time* dimension, Rabobank and PostNL showcase a focus on the ‘past’. Their innovation projects often lean towards traditional business practices due to a deep appreciation for the company’s identity and history. One coachee said: “It’s an old company, it has a huge history and some people have already been working there for a long time. And people are in general resistant to change... There’s a history behind it that they think, oh, another guy with a new idea, I’m not going to do that.” Established

businesses wield dominant power due to their extensive market experience. As a result, innovations may be perceived as threats to the company’s tradition and identity, leading to protracted experimental timelines for innovation projects. Emphasizing ‘past’ cultural value for *time* was found to enhance creative confidence through *vicarious experience* (Bandura, 1997) by using relevant previous tasks as references. However, an emphasis on business-as-usual projects may limit exposure to creative or innovative cases. Moreover, it was discovered that a reduced openness to explore may diminish creative confidence as *learning orientation* (Dweck, 1986) may decrease. Finally, prioritizing established practices over novel (and potentially risky) challenges may undermine *performance orientation* (Dweck, 1986).

Aim: For this dimension, both companies fell towards the ‘achievement’ side. Employees perceive working on innovation projects as a serious endeavor, thereby adopting a careful mindset in their daily activities. This mindset is often accompanied by realistic judgments regarding the ideas’ viability and feasibility, making the cultivation of creativity a challenging task. One coach stated: “But whenever transition to a next phase, there’s a committee that could say, ‘I don’t think that this is a real business’, ‘we need to stop’, or ‘you need more money’, or ‘you need to change things’, ‘so that’s a really good idea, but we don’t initiate the ideas.’ You need to pivot all these things. And that is because the business knows the business.” Consequently, on the other hand, insights associated with ‘care’ indicated a yearning for a relaxed environment where individuals are not confined to only business content. It was revealed that cultivating ‘care’ cultural value for *aim* can result in a boost in creative confidence since *learning orientation* (Dweck, 1986) is facilitated by fostering a supportive environment with ample feedback from teams. Moreover, it can bolster *performance orientation* (Dweck, 1986) through more positive task evaluations. On the contrary, with the ‘achievement’ cultural value adopted for *aim*, employees may find it easier to acquire relevant skills for innovation due to their proficiency in the business domain. However, this focus was found to hinder *mastery experience* (Bandura, 1997) as creative tasks might become more difficult to accomplish with a business mindset. Additionally, it was found that frequent judgments during innovative processes may lead to more negative feedback on creative ideas, affecting *performance orientation* (Dweck, 1986). Therefore, to protect creative confidence, the innovative process should set a clear boundary between exploration and judgment.

Attitude: Lastly, a strong sense of ‘duty’ prevails in both companies on the *attitude* dimension. They prefer well-defined rules and tend to shy away from uncertainty. Most practices, especially creative ones, need to be demonstrated to the coachees before they actually do it, otherwise, they might not trust that the process would lead to an outcome. One coach shared an occasion when he tried to motivate his coachees to draw: “So I had to first let them understand what I mean with drawing, you don’t have to be Picasso, you know, like a triangle with a circle that’s a lady in the dress, right?” The development of mutual trust between coaches and coachees becomes crucial: coaches are supposed to place trust in the coachees’ business competence, while the coachees should trust in the ambiguous processes facilitated by the coaches. It was found that pursuing ‘fun’ cultural value for *attitude* can boost employees’ creative confidence through *learning orientation* (Dweck, 1986) by providing opportunities to explore unconventional approaches. It could also enhance *mastery experience* (Bandura, 1997) through a personalized and flexible approach, encouraging individual progression and instilling confidence in mastering future creative tasks. On the other hand, possessing ‘duty’ cultural value for *attitude* was found to boost creative confidence through *learning orientation* (Dweck, 1986) by offering structured guidelines for exploring new areas. It can enhance *vicarious experience* (Bandura, 1997) by providing clear demonstrations for coachees in creative tasks. However, it was revealed that rigid adherence to rules might hinder *performance orientation* (Dweck, 1986) by harshly judging imperfect ideas and overlooking their positive aspects. Additionally, it can diminish *mastery experience* (Bandura, 1997) by delaying creative ideas due to extensive validation time.

Based on these insights, we aimed to explore potential design directions to enhance certain cultural values in these companies, thereby expanding its positive influence on creative confidence. Direct changes to established cultural values can lead to misalignments between these values and the intended practices, potentially causing cognitive dissonance (Burnes & James, 1995). Nevertheless, organizations can heighten their sensitivity and awareness towards alternative values. The dimensions of *hierarchy* and *time* suggest that Rabobank and PostNL possess a lot of adherence to the established practices and structures, making these values difficult to change. On the other hand, the companies’ positioning on the *identification* dimension (on the ‘together’ side) already exhibits a good alignment between cultural values and creative confidence. Consequently, from the five dimensions,

the *aim* and *attitude* dimensions emerged as having the most potential and positive impact on fostering creative confidence. Currently, Rabobank and PostNL are lacking more emphasis on the values of ‘care’ (*aim* dimension) and ‘fun’ (*attitude* dimension). Therefore, to achieve our second aim of designing an intervention that supports creative confidence aligned with the organizations’ cultural values, the follow-up study focused on enhancing coachees’ sensitivity and awareness towards these two values.

5. Follow-up study

5.1. Follow-up study method

The follow-up study aimed to explore how a design solution can be developed to support the development of creative confidence via enhancing awareness of ‘care’ (*aim* dimension) and ‘fun’ (*attitude* dimension) cultural values. Two co-design workshops (one with Rabobank and another with PostNL) were carried out with the same participants from the preliminary study to co-create solutions. After analyzing and building on the ideas generated during the co-design workshops, an evaluation workshop was held to evaluate the final design solution - the CreatOrg toolkit. A total of nine experts participated (four from TU Delft and one each from Rabobank, PostNL, Shell, Thinkwise, and Nationaal Archief). This 1.5-hour workshop began with a presentation to communicate the preliminary study insights (Section 4.2), followed by an hour dedicated to experimenting with the toolkit. Participants were asked to complete a questionnaire to measure their self-perceived creative confidence levels before and after the intervention. At the end of the workshop, participants provided written feedback on the design solution.

5.2. Follow-up study result: CreatOrg workshop toolkit

In order to promote the values of ‘care’ and ‘fun’, the co-design workshops revealed two vital design requirements: 1) The design should enable teams to co-build on each other’s success and ideas. 2) The design should provide a safe place, where people have more ownership of their ideas. We designed the CreatOrg workshop toolkit (Figure 4) for innovation coaches and coachees. Since it is fully instructed, additional facilitators are not necessary; the coach can fulfill that role. The main objective of this toolkit is to trigger teams to become aware of creative cultural

values of ‘care’ and ‘fun’ by reflecting on their previous coaching and workshop experiences. Participants are encouraged to generate their own ideas and insights to empower creative confidence. Furthermore, the activities aid in translating these ideas into practical actions that have the potential to be integrated into teams’ future practices.



Figure 4. CreatOrg workshop toolkit overview

The CreatOrg workshop toolkit creates an atmosphere for coaches and coachees to co-build and grant ownership of their own creative confidence solutions. It comprises four activities: (1) Participants reflect on their past coaching/workshop experiences and share their thoughts on idea supportiveness and openness. (2) They identify barriers to creative confidence and brainstorm ideas to overcome them. (3) Participants translate these ideas into practical solutions. (4) Finally, they are encouraged to implement their solutions and fill in feedback and reflections.

After the evaluation workshop, self-perceived creative confidence questionnaires and written feedback were collected for analysis. Due to the limited number of participants, a statistical analysis was not possible, but the participants’ general impression was that the intervention led to a perceived increase in creative confidence. All company members from Rabobank and PostNL recognized and validated the creative culture pattern as presented in Section 4.2. The majority of the participants agreed that being in a culture that emphasizes ‘care’ and ‘fun’ contributes to greater creative confidence. One participant said: “If you feel safe, supported, and appreciated, you are more likely to share and open to failure... Easier to build upon others’ (ideas) and think outside of the box when it is not all serious and outcome focused.” However, some participants also cautioned against overly

emphasizing ‘care’ and ‘fun’. They suggested striking a balance between ‘care’ and ‘achievement’, and between ‘fun’ and ‘duty’. One participant mentioned: “‘Care’ definitely helps to bring ideas, however, little pressure is needed otherwise nothing will happen... ‘Fun’ definitely helps to bring confidence; however, the ideas need to be viable/feasible in a business context as well.” Moreover, all participants expressed high levels of willingness to implement support and openness in future coaching activities, indicating that the intervention enhanced participants’ awareness towards those cultural values. Additionally, evaluation results also suggest that the toolkit holds potential for long-term viability. For the generalization of the toolkit, participants recommended incorporating explanations of the cultural dimensions to enhance relevance to other organizations.

6. Discussion

In collaboration with two Dutch companies, Rabobank and PostNL, the preliminary study was initiated with the objective of exploring the influence of creative cultural values on employees’ creative confidence. After that, a follow-up study was conducted where the CreatOrg workshop toolkit was created to foster employees’ creative confidence.

Our studies contribute to a deeper understanding of the links between creative cultural values and employees’ creative confidence. Creative confidence is intricately associated with the companies’ creative cultures, in such interconnected ways that can lead to both positive and negative impacts on creative confidence. With the mapped creative cultures of Rabobank and PostNL and the designed toolkit, coaches and coachees can potentially adapt their practices to better foster creative confidence. It is also captivating to note that both companies demonstrate ‘past’ values for their creative cultures, despite their emphasis on innovation. This result aligns with the earlier statement that, even though businesses can play a leading role in shaping the future, they often remain passive in the face of changes (Hovorka & Peter, 2019). This also suggests that creativity and futuring are mutually affected: while existing literature often highlights the role of creativity in assisting organizations to become future-ready, having a strong cultural emphasis on future could also influence how people behave and express their creativity. This hypothesis is not verified because there are no insights emerging from the ‘future’ side of the *time* dimension. Similarly, the value of ‘low hierarchy’ also remains unknown regarding its influence on creative

confidence. The evaluation of the CreatOrg workshop toolkit showcased a positive result in increasing participants' creative confidence levels. This might align with the concept of *vicarious experiences* (Bandura, 1997), as the toolkit activities are designed to reflect on past experiences.

One notable limitation was the imbalance in the number of coaches and coachees within each company during the data collection in the preliminary study. While Rabobank had four coaches and one coachee, PostNL had five coachees and no coaches. This imbalance may have placed bias in the data gathered, consequently affecting the analysis. Another limitation was that in the follow-up study, only individuals who scored 50% or higher on the creative confidence self-assessment participated in the evaluation workshop (thus only individuals with high creative confidence levels had experimented with the toolkit). As such, the effects of the intervention on individuals with low creative confidence were not verified.

The first implication would be to explore if the cultural value of 'future' might influence employees' creativity and creative confidence. If the mutual interrelations between creativity and future thinking are explored, the conceptual lens can be enhanced and iterated into a more comprehensive framework. Since cultural values are deeply embedded and not easily changeable, it would be essential to assess the toolkit's long-term durability and monitor changes in companies' behaviors, for example, through periodic follow-up observations and evaluations. Rabobank's and PostNL's creative cultural values share some overlaps even though they are from different industries and business backgrounds. This could suggest a potential direction for future studies to explore the interplay between culture, creativity, and future thinking across various types of organizations, such as educational institutions and non-profit organizations.

7. Conclusion

Creativity is crucial for organizations to prepare for future-readiness. While recognizing that organizations are cultivating their environments for creativity and innovation, they should also be concerned about the potential cultural impacts on employees' creative confidence. This paper addresses the gap regarding how an organization's creative cultural values influence employees' creative confidence. Recognizing the potential of 'care' and 'fun' for enhancing creative confidence, the CreatOrg workshop toolkit was developed to encourage awareness towards those two cultural values. The

evaluation results are positive although preliminary, with further research needed to validate its long-term impact and to explore how future elements might influence creative behaviors. If employees' creative confidence makes creativity thrive within organizations, it would not only help them survive in the evolving markets but also empower them to proactively and flexibly co-create a better future.

8. References

- Ali Taha, V., Sirkova, M., & Ferencova, M. (2016). The impact of organizational culture on creativity and innovation. *Polish journal of management studies*, 14(1), 7–17. <https://doi.org/10.17512/pjms.2016.14.1.01>
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in organizational behavior*, 10(1), 123–167.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the Work Environment for Creativity. *The Academy of Management Journal*, 39(5), 1154–1184.
- Baer, M., & Oldham, G. R. (2006). The Curvilinear Relation Between Experienced Creative Time Pressure and Creativity: Moderating Effects of Openness to Experience and Support for Creativity. *Journal of Applied Psychology*, 91(4), 963. <https://doi.org/10.1037/0021-9010.91.4.963>
- Balcom Raleigh, N. A., & Heinonen, S. (2019). Entangling and Elevating Creativity and Criticality in Participatory Futuring Engagements. *World Futures Review*, 11(2), 141–162. <https://doi.org/10.1177/1946756718807014>
- Bandura, A. (1986). *Social foundations of thought and action : a social cognitive theory*. Prentice-Hall.
- Bandura, A. (1997). *Self-efficacy : the exercise of control*. W.H. Freeman and Company.
- Beghetto, R. A. (2016). Creative Openings in the Social Interactions of Teaching. *Creativity: Theories – Research – Applications*, 3(2), 261–273. <https://doi.org/10.1515/ctra-2016-0017>
- Beghetto, R. A. (2024). Teaching for Transformational Creativity: Fostering a Principled Approach to Creative Action. In *Transformational Creativity* (pp. 29–42). https://doi.org/10.1007/978-3-031-51590-3_3
- Beghetto, R. A., & Karwowski, M. (2017). Toward Untangling Creative Self-Beliefs. In *The Creative Self* (pp. 3–22). <https://doi.org/10.1016/B978-0-12-809790-8.00001-7>
- Bell, B. S., & Kozlowski, S. W. J. (2002). Goal orientation and ability: Interactive effects on self-efficacy, performance, and knowledge. *Journal of Applied Psychology*, 87(3), 497–505. <https://doi.org/10.1037/0021-9010.87.3.497>
- Boeijen, A. v., & Zijlstra, Y. (2020). *Culture sensitive design: a guide to culture in practice*. BIS Publishers.
- Bong, M., & Skaalvik, E. M. (2003). Academic Self-Concept and Self-Efficacy: How Different Are They Really? *Educational Psychology Review*, 15(1), 1–40. <https://doi.org/10.1023/A:1021302408382>

- Burkus, D. (2014). How to tell if your company has a creative culture. *Harvard Business Review*, 2.
- Burnes, B., & James, H. (1995). Culture, cognitive dissonance and the management of change. *International Journal of Operations & Production Management*, 15(8), 14–33. <https://doi.org/10.1108/01443579510094062>
- Deng, L., Wang, L., & Zhao, Y. (2016). How Creativity Was Affected by Environmental Factors and Individual Characteristics: A Cross-Cultural Comparison Perspective. *Creativity Research Journal*, 28(3), 357–366.
- Derecskei, A. (2016). How do leadership styles influence the creativity of employees? *Society and Economy*, 38(1), 103–118. <https://doi.org/10.1556/204.2016.38.1.7>
- Dunne, A., & Raby, F. (2013). *Speculative Everything, With a new preface by the authors: Design, Fiction, and Social Dreaming*. MIT press.
- Dweck, C. S. (1986). Motivational Processes Affecting Learning. *American Psychologist*, 41(10), 1040–1048.
- Glăveanu, V. P. (2013). Rewriting the Language of Creativity: The Five A's Framework. *Review of General Psychology*, 17(1), 69–81. <https://doi.org/10.1037/a0029528>
- Glăveanu, V. P. (2017). The creative self in dialogue. In *The creative self* (pp. 117–135). Academic Press.
- Gotlieb, R. J. M., Hyde, E., Immordino-Yang, M. H., & Kaufman, S. B. (2019). Imagination is the seed of creativity. In *Cambridge University Press eBooks* (pp. 709–731). <https://doi.org/10.1017/9781316979839.036>
- Hofstede, G. H., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations : software of the mind* (3rd ed.). McGraw-Hill.
- Hopkins, R. (2019). *From what is to what if : unleashing the power of imagination to create the future we want*. Chelsea Green Publishing. <https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=2255954>
- Hovorka, D., & Peter, S. (2019). How the Future is Done. *Proceedings of the 52nd Annual Hawaii International Conference on System Sciences/Proceedings of the Annual Hawaii International Conference on System Sciences*. <https://doi.org/10.24251/hicss.2019.756>
- Howardson, G. N., & Behrend, T. S. (2015). The relative importance of specific self-efficacy sources in pretraining self-efficacy beliefs. *International Journal of Training & Development*, 19(4), 233–252. <https://doi.org/10.1111/ijtd.12060>
- Karwowski, M., Lebeda, I., & Beghetto, R. A. (2019). 19 Creative Self-Beliefs. *The Cambridge handbook of creativity*, 396.
- Kelley, T., & Kelley, D. (2013). *Creative confidence : unleashing the creative potential within us all*. Crown Business.
- Li, L. (2022). Reskilling and Upskilling the Future-ready Workforce for Industry 4.0 and Beyond. *Inf Syst Front*. <https://doi.org/10.1007/s10796-022-10308-y>
- Lubart, T., Kaufman, J. C., & Sternberg, R. J. (2010). Cross-Cultural Perspectives on Creativity. In *The Cambridge Handbook of Creativity* (pp. 265–278). <https://doi.org/10.1017/CBO9780511763205.017>
- Mathisen, G. E., & Bronnick, K. S. (2009). Creative self-efficacy: An intervention study. *International Journal of Educational Research*, 48(1), 21–29. <https://doi.org/10.1016/j.ijer.2009.02.009>
- Montuori, A., & Donnelly, G. (2022). Why creative futures? In *Routledge eBooks* (pp. 9–18). <https://doi.org/10.4324/9781003020714-3>
- Mumford, M. D., & Simonton, D. K. (1997). Creativity in the workplace: People, problems, and structures. *The journal of creative behavior*, 31(1), 1–6.
- Niu, W., & Sternberg, R. J. (2001). Cultural influences on artistic creativity and its evaluation. *International Journal of Psychology*, 36(4), 225–241. <https://doi.org/10.1080/00207590143000036>
- Perry-Smith, J. E. (2006). Social yet creative: the role of social relationships in facilitating individual creativity. *The Academy of Management Journal*, 49(1), 85–101.
- Phelan, S., & Young, A. M. (2003). Understanding creativity in the workplace: an examination of individual styles and training in relation to creative confidence and creative self-leadership. *Journal of Creative Behavior*, 37(4), 266–281.
- Pitta, D. A., Wood, V. R., & Franzak, F. J. (2008). Nurturing an effective creative culture within a marketing organization. *The Journal of Consumer Marketing*, 25(3), 137–148. <https://doi.org/10.1108/07363760810870635>
- Runco, M. A. (2004). Everyone has creative potential. In R. J. Sternberg, E. L. Grigorenko, & J. L. Singer (Eds.), *Creativity: From potential to realization* (pp. 21–30). American Psychological Association. <https://doi.org/10.1037/10692-002>
- Sanders, E. B.-N., & Stappers, P. J. (2012). *Convivial toolbox: generative research for the front end of design*. BIS Publishers.
- Schein, E. H., & Schein, P. A. (2017). *Organizational culture and leadership* (5th edition). John Wiley and Sons, Inc. <https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=1433117>
- Tesluk, P., Farr, J., & Klein, S. (1997). Influences of organizational culture and climate on individual creativity. *The journal of creative behavior*, 31(1), 27–41. <https://doi.org/10.1002/j.2162-6057.1997.tb00779.x>
- Tierney, P., & Farmer, S. M. (2002). Creative Self-Efficacy: Its Potential Antecedents and Relationship to Creative Performance. *The Academy of Management Journal*, 45(6), 1137–1148.
- Tierney, P., & Farmer, S. M. (2011). Creative Self-Efficacy Development and Creative Performance over Time. *Journal of Applied Psychology*, 96(2), 277–293.
- Urbancová, H. (2013). Competitive advantage achievement through innovation and knowledge. *Journal of Competitiveness*, 5(1), 82–96. <https://doi.org/10.7441/joc.2013.01.06>
- Visser, F. S., Stappers, P. J., van der Lugt, R., & Sanders, E. B.-N. (2005). Contextmapping: experiences from practice. *CoDesign*, 1(2), 119–149. <https://doi.org/10.1080/15710880500135987>